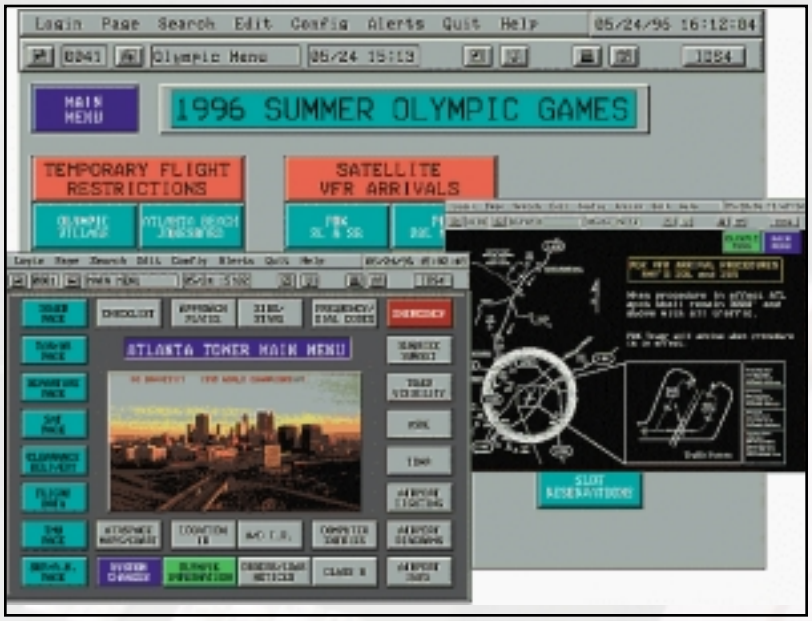
ASOS Controller Equipment (ACE)/Integrated Display System (IDS)

The Automated Surface Observing System (ASOS) Controller Equipment-Information Display System (ACE-IDS) is a network of individual workstations designed to provide Air Traffic Control Specialists (ATCS's) with static and dynamic data regarding weather and other safety critical operational data.

San Francisco Tower Display

The ACE-IDS is an industrial grade Commercial-Off-The-Shelf/Non-developmental Item (COTS/NDI) providing the ATCS with over 100,000 available pages in a site configurable database. Flat panel displays mounted at designated positions within FAA field facilities are available with touch screen technology or with a trackball or mouse. Security measures resident within the system prevent unauthorized access to information.

The ACE-IDS currently interfaces with the ASOS, Aviation Weather Information Processing System (AWIPS), Digital Altimeter Setting Indicator (DASI), Flight Data Input/Output (FDIO), Low Level Windshear Alert System (LLWAS), Runway Visual Range (RVR), Terminal Doppler Weather Radar (TDWR) Ribbon Display, and the Systems Atlanta Information Display System 4 (SAIDS 4). Preplanned Product Improvements include interfaces to the TDWR Graphical Situation Display (TDWR GSD), Instrument Landing Systems (ILS's), and Weather and Radar Processor (WARP).



Atlantc Tower Display

BACKGROUND

The ACE-IDS is an upgrade to the ASOS Controller Equipment (ACE) system. Designed for the Terminal and Terminal Radar Approach Control (TRACON) environment, the ACE was originally installed at the Will Rogers World Airport in Oklahoma City, OK, and the Dallas/Fort Worth International Airport in Irving, TX. Upon successful completion of Operational Test and Evaluation (OT&E), the system was also installed at the Ronald Reagan National Airport in Washington, DC.

In August of 1998, a requirement was identified for an information display system in the FAA's new consolidated metroplex TRACON facilities. The ACE was upgraded to accommodate the interfaces required at these facilities.

ACCOMPLISHMENTS

- Successful Year 2000 (Y2K) Compliance Testing and Certification.
- Completed Factory Acceptance Testing of Phase I equipment and software.
- Completed installation and Interface Testing at the new Atlanta TRACON in Peachtree City, GA.

FUTURE WORK

- Human Factors Evaluation of the ACE-IDS operational suitability and effectiveness at the William J. Hughes Technical Center.
- Conduct Operational Testing (OT) of the ACE-IDS at Northern California TRACON (NCT) and Will Rogers World Airport (OKC).
- Testing of Preplanned Product Improvements (P^3I), including future interfaces to such systems as the Weather and Radar Processor (WARP) and the Terminal Doppler Weather Radar Graphical Situation Display (TDWR GSD).

For additional information regarding the ASOS Controller Equipment-Information Display System (ACE-IDS) program, please contact:

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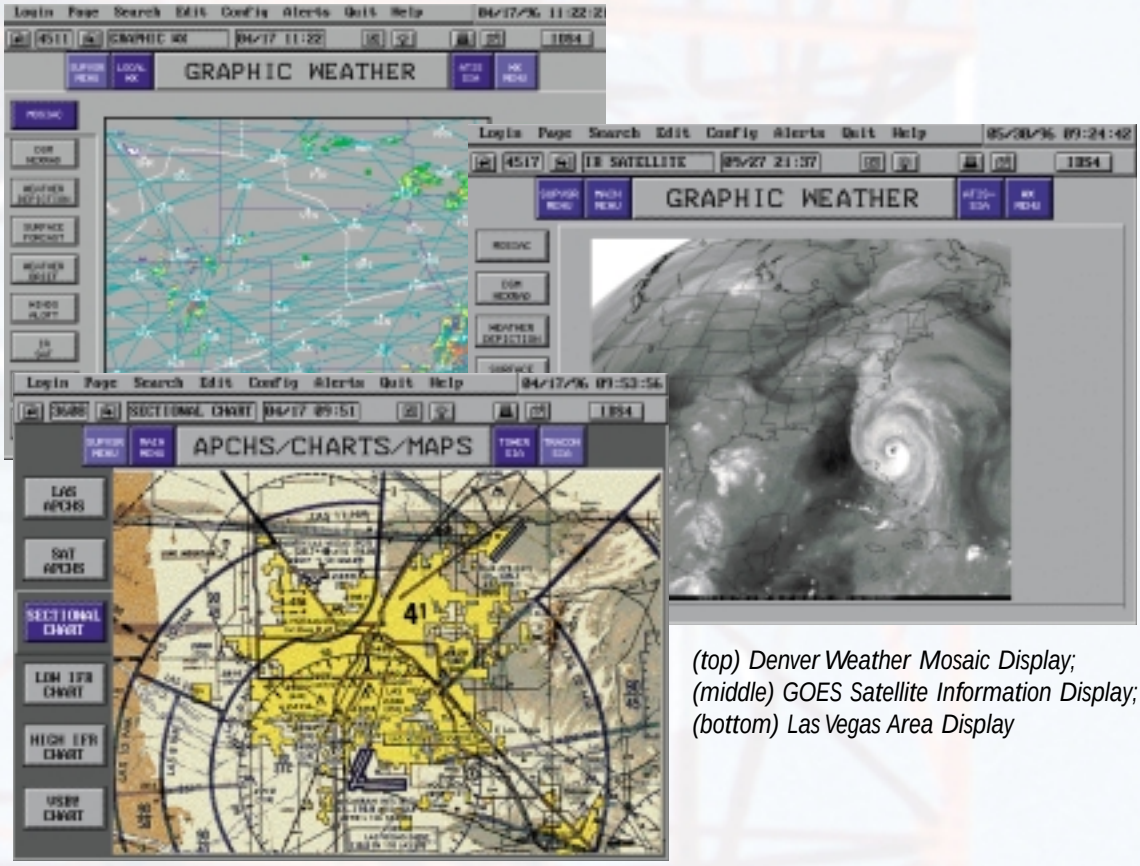

(top) Denver Weather Mosaic Display; (middle) GOES Satellite Information Display; (bottom) Las Vegas Area Display